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AUTHOR Stilwell, William E.; Barclay, James R.
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ABSTRACT

This is an evaluation of developmental guidance services' affective education program. Data was collected on children enrolled in Buerkle School and in a control school (Julia Shannon) in Stuttgart School District No. 22 (AR). Third- and fourth-grade level boys and girls who had been in the program for the full 1975-1976 year provided data for this evaluation. The Barclay Classroom Climate Inventory (BCCI) which collates data from each student, their classmates, and classroom teacher was the primary evaluation instrument. Fifteen variables were considered in the analyses by sex, grade level, and school. Covariance analyses revealed the program school children (Buerkle) had a more positive self-competency, enjoyed a more positive attitude toward school, and received more positive teacher support than the children who attended the control school. In addition to the programmatic main effects, the analyses revealed several developmental patterns by sex and by grade level. Data is presented in a number of graphs and charts. (Author/MS)

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EFFECTS OF AFFECTIVE EDUCATION THROUGH DEVELOPMENTAL GUIDANCE SERVICES: A ONE-YEAR STUDY

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William E. Stilwell
University of Kentucky

and

James R. Barclay
University of Kentucky

The evaluation of developmental guidance services' affective education program considered data collected on children enrolled in Buerkle School and in a control school (Julia Shannon) in Stuttgart School District No. 22 (AR). Third and fourth grade level boys and girls who had been in the program for the full 1975-1976 year provided data for this evaluation. The Barclay Classroom Climate Inventory (BCCI) which collates data from each student, their classmates, and classroom teacher was the primary evaluation instrument. Fifteen variables were considered in the analyses by sex, grade level, and school. Covariance analyses revealed the program school children (Buerkle) had a more positive self-competency, enjoyed a more positive attitude toward school, and received more positive teacher support than the children who attended the control school. In addition to the programmatic main effects, the analyses revealed several developmental patterns by sex and by grade level.

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The purpose of this report is to describe the effects of the extended elementary guidance services offered by Stuttgart School District No. 22 during 1975-1976. This report is the third in a series prepared for the District's ESEA Title III Program Director.

By way of a review the two earlier reports (1) described the effects of the pilot program in affective education undertaken February 1975 to May 1975 and (2) compared the target (Buerkle) and control (Shannon) schools as of May 1975. The primary assessment technique used for these two reports was the Barclay Classroom Climate Inventory (BCCI). Briefly, Stilwell and Barclay (1976) reported that the expanded elementary guidance services at Buerkle school had profound impacts upon second, third, and fourth graders and their teachers, based upon the BCCI data. By inference the program had a similarly directed impact upon the parents of the children involved in the program. The data in Padgett's (1976) report suggest that the 12-week in-service program at Buerkle brought that school (children and teachers) to a near parity with the Shannon children and teachers. That is, the two schools appeared to be very similar on a number of important BCCI dimensions. Thus, these two earlier reports present a historical record showing the development from an evaluation point of view of this exciting, model program.

The present report attempts to evaluate the impact of the expanded guidance services during the 1975-1976 school year. In so doing, we will look at data obtained from children and teachers at Buerkle and Julia Shannon schools. These data will allow us to assess the progress at Buerkle in terms of reducing the incidence of shy, withdrawn children and in terms of inverting the percentage of affective education problems. Further, these data will allow us to contrast classrooms and grade levels within the two schools and between the two schools. Lastly, based upon the analyses of these data we will be able to make a series

of summary comments and recommendations for 1976-1977.

The Children

Boys and girls enrolled in the second, third and fourth grades at Buerkle and at Julia Shannon were assessed with the Barclay Classroom Climate Inventory in May 1975 and again in May 1976. These two assessments have provided us with data on peer support, teacher judgments and self-competency so we can look at similarities and differences between the schools over time (May 1975 to May 1976). The crucial data for this evaluation becomes those children who were second graders and now are third graders and those children who are now fourth graders. We were able to identify 58 boys and 47 girls who were at Buerkle both in May 1975 and in May 1976. 74 boys and 59 girls were enrolled at Julia Shannon for both assessments. Also the data from second through fourth graders at the two schools in May 1976 will be analyzed. Lastly, two groups of children have been singled out for special consideration. First the "goners" were children assessed in May 1975, but not assessed in May 1976. The second group the "newcomers" were not assessed in May 1975, but were participants in the affective education program in May 1976. Thus the BCCI data obtained from Buerkle and Shannon Schools will be analyzed in a number of ways.

The Data Analysis

The data analysis for this report was completed in several stages. First, we looked at the BCCI determination in May 1975 of shy, reticenct or withdraw behavior and those children's particular BCCI status as of May 1976. In this same analysis we observed the change in BCCI status (1975 to 1976) for those children identified as disruptive . This information is presented in Table 1. Second, we considered the affective needs of the children during the May 1975 to May 1976 period. The BCCI identifies eight "suggested problem areas" or skill

deficits. Children reduced, acquired, or maintained their problems in selected areas. These patterns are presented in Table 2. Third, we considered the BCCI scores in each classroom at Buerkle and at Shannon. These scores are reported in Tables 3-6 and only briefly discussed. The main source of contrast for these by sex and by classroom scores is the User's Manual for the BCCI (Barclay, 1974, p. 130ff). Fourth, these same data were grouped by grade level (2nd, 3rd, and 4th) for Buerkle and Shannon. Again these data were analyzed (Tables 7-10) and discussed. Fifth and most crucial for this report we analyzed the 1975-1976 BCCI scores by a covariance technique (Table 11). The data considered in this fourth analysis were obtained from second and third graders who now are third and fourth grade level students, respectively. Lastly, we considered two special groups of children, the "goners" and the "newcomers" whose results are presented in Tables 12 and 13. Thus, several interesting or crucial analyses were performed and subsequently presented in this report.

RESULTS

The results from these several analyses suggest patterns which are encouraging to the Stuttgart School District and which are indicating new directions for elements of the present affective education program. The encouraging portion of this report indicates that on a number of dimensions the expanded elementary guidance services have indeed met the challenge of the proposal and reached its criteria. The new direction portion of this report reinforces inservice training of new teachers and of continuing support for teachers presently in the program. Further, this report encourages Stuttgart school personnel to address the needs of children who leave school, in particular.

Shy, Reticient, and Withdrawn and Disruptive Children

In the May 1975 or inthe May 1976 BCCI assessment at Buerkle 28 boys and girls were identified as shy, withdrawn, and reticent, or as disturptive. Table 1 presents the change patterns for the 15 boys and 13 girls. Each of these children

either reduced or acquired or maintained their shyness or their disruptiveness. The desirable pattern for children identified as shy and reticent or as disruptive was to loose their identification. The problematic pattern was the children who either became reticent or disruptive or who maintained their particular BCCI identified condition. The program milestone (reduction by 50 percent of the frequency of shy or of disruptive children) was reached based on the May 1975 to May 1976 reporting period. Table 1 shows that half of the boys and girls identified as either shy, reticent, and withdrawn or as disruptive in 1975 were not so identified in 1976.

Table 1 also indicates that several boys and girls <u>became</u> shy, reticent and withdrawn or disruptive during the 1975-76 school year. These 14 boys and girls along with the six children who maintained their behavioral pattern become the new group for incidence reduction by May 1977.

Lastly, in this section, several interesting patterns can be discerned upon a closer inspection of Table 1. The patterns suggest that boys and girls have a different responsiveness to the affective education program offered by the expanded guidance services. Three patterns emerge and deserve comment: (1) boys appear to become reticent more often than girls; and (2) more girls (5) appear to be resistent to change than boys (1). The third pattern is that both boys and girls appear to become disruptive at about the same rate. A set of reasons for these patterns could be generated but they are beyond the scope of this report.

Changes in Affective Needs

In order to analyze the impact of the affective education program of the expanded elementary guidance services we considered the "suggested problem areas" for the 47 girls and 58 boys on whom we had complete data sets. Of the girls all 47 had at least one problem area identified by the BCCI. That is all 47 girls scored in such a way that either in the 1975 or in the 1976 assessment each had a suggested problem. Thus each girl either reduced, acquired or maintained at least one affective need during the 1975-76 school year. Similarly 46 of the 58 boys either reduced, acquired, or maintained at least one need during the school year. The display of these patterns is presented in Table 2.

Inspection of Table 2 reveals that the Stuttgart affective education program was successful (i.e., reduced a suspected problem for 80 percent of the students) in three areas for boys and girls. The program successfully reached the 80 percent milestone for boys and girls with suspected problems in (1) self-competency, (2) physical development, and (3) attitude toward school. Further, for boys the program approached the success criteria in group interaction (75 percent) and cognitive development (77 percent). Thus the affective education program appeared to be "effective" in three BCCI assessed areas for girls and in five of eight areas for boys.

The two right hand columns of Table 2 suggest priorities for 1976-1977. The most pressing need continues to be improved group interaction skills. Cognitive-motivational needs continue to rank second among the eight BCCI areas. Self-control and a more positive attitude toward school also appear as possible priority areas for 1976-1977. Still the affective education program can look at these two columns with pride: five of eight areas showed <u>fewer</u> boys and girls with suggested problems.

From these two tables we obtain the crucial information for reporting on the "success" of the expanded elementary guidance services in Stuttgart. At this point the affective education program can report on its satisfactorily meeting five program milestones (i.e., shyness, disruptiveness, self-competency, physical development, and attitude toward school) and by approaching criteria for boys in three more areas (i.e., group interaction, self-control and cognitive development). For these several reasons the Stuttgart affective education should be considered by other educators as a model program.

Differences Among the Ten Buerkle Classrooms (Boys)

The boys in the ten Buerkle classrooms became very similar over the program year. By May 1976 the ratings for boys were different in only one area, Teacher's use of negative adjectives (TR-). The other classroom means are reported in Table 3. The ranges between high TR- and low TR- scores suggests that we still have a great deal of variability in the classroom teacher's willingness to use negative adjectives when rating boys.

Differences Among the Ten Buerkle Classrooms (Girls)

For the girls at Buerkle there was not as much consensus as we observed for boys (see Table 4). On four BCCI variables we obtain between classroom differences that were interesting or significant. The interesting difference occurred on the peer group enterprising scale (GE). The mean GE score was 4.8625 and the ten classrooms ranged between 1.1667 and 10.4000. Although the classrooms were different only at the $p < .066$ significance level, the difference becomes interesting when the specific classrooms are compared between boys and girls. For example, the lowest GE score for girls occurred in the same classroom as the highest GE score for boys. This kind of contrast makes the data from the BCCI extremely interesting. The girls in the ten classrooms were

different significantly for REAL ($p < .002$), TR+ ($p < .000$) and CCI ($p < .029$). The scores on these variables reveal no consistent high or low classroom, and probably should not because each has a different climate. The range does suggest that some teachers infrequently use positive adjectives for girls (8.6364) and that other teachers are effusive in their use (30.3750). The range for attitude toward school was not great (8.6 to 11.75), but sufficient for the p-level.

These results from the ten Buerkle classrooms should be considered in terms of feedback to the teachers and program staff. The specific by teacher differences should be discussed within each grade level team.

Differences Among the 12 Shannon Classrooms (Boys)

Two analyses of the 12 Shannon classrooms were performed. One analysis focused on the present topic of this paper, the 1976 data, and is reported in Table 5. The second analysis which was completed primarily for information purposes considered the 12 classrooms in May 1975. The earlier analysis of 12 Shannon classrooms is presented in Table 5A.

The boys at Shannon in 1976 present a unique group in their degree of variability. They are in a sense unique because we are tapping the unfettered classroom programs which are not united in the same degree as the affective education program classrooms at Buerkle. More specifically the boys appeared to be different on eight BCCI variables: STOT, REAL, INT, SOC, VTOT, TET, TR-, and CCI. Although selected classrooms on the variables appreared frequently at the high or low end of the ranges on these eight BCCI scales for boys, the ranking of classrooms within these extremes seemed to vary greatly. As in previous discussions of these kinds of data, we recommend that the appropriate "high" scoring teachers or classrooms serve as models for other teachers or classrooms at the control school, Julia Shannon.

For the record we report on the Shannon classrooms assessed with the BCCI in May 1975. Interestingly the boys on eight BCCI scale scores were different. Even more so the boys in 1975 were different on the same scores as they were significantly different in 1976. Any further comments on the dozen classrooms would be unwarranted because the student compositions have changed (e.g., 3rd graders are now 4th graders) and some teachers have changed their room assignments.

Differences Among the 12 Shannon Classrooms (Girls)

As we have just reported with the boys we developed two analyses of the 12 Shannon classroom for the girls. The 1976 analysis is relevant to this report (see Table 6) and the 1975 display of data is appropriate for information purposes (see Table 6A).

In 1976 the Shannon girls appear to be uniquely different from each other on eight BCCI variables. The eight 1976 assessment variable differences among the classrooms were found for STOT, REAL, INT, SOC, VTOT, TR+, TR-, and CCI. Somewhat surprisingly the boys at Shannon were also very different on these same eight variables. The examination of the high and low classrooms on these eight variables suggests a stability at both ends of the rankings on the student developed scores (e.g., STOT and VTOT). Still we must note that although boys and girls developed broad differences on the same eight BCCI variables, the same classroom units did not enjoy, usually, the same ranked position (e.g., high boy STOT was 14-35, but high girl was 14-38) and this kind of different pattern by sex of student was found on seven of the eight variables.

In the earlier assessment (May 1975) the 12 classrooms involving different students and teachers were significantly different on seven BCCI variables. The seven variables were the same ones as those discussed in the previous three analyses of the 12 Shannon classrooms. Teacher positive ratings (TR+) was not

significantly different for the 12 classrooms.

A perplexing question can be raised: Why were 12 classrooms apparently so similarly different during two assessments approximately one year apart? A closer look, probably through direct observation and interview of the children, their parents, the teachers, counselor and principal might develop some notions to account for this pattern.

Differences Among the Three Grade Levels at Buerkle (Boys)

In this developmental analysis of the BCCI data obtained from Buerkle and Shannon schools for 1976 we next looked at the differences between the three grade levels, first at Buerkle and later at Shannon. The results are interesting, particularly for their rarity (see Table 7).

The boys at Buerkle in 1976 were different by grade level on only two variables, GR and REAL. On the first variable we found a pattern of differences such that the 4th graders received the fewest group reticent nominations, the 3rd graders received the most, and the second graders were in the middle. One might say of the fourth graders that they had benefitted from the first year of the program, but the third graders had also been in the program for a year. On the second variable, career awareness of realistic-masculine activities, developed its own unique pattern such that the ranking by grade level was second, fourth, and third. Typically we would expect the career awareness scales to reflect an increased awareness over time, which is not reflected among these ten classrooms at Buerkle. We might be observing some additional benefits of the affective education program.

Differences Among the Three Grade Levels at Buerkle (Girls)

As with the boys at Buerkle we found in 1976 a near paucity of differences among grade levels for the girls. Only three BCCI variables produced significant differences (3 out of 15). Thus we might suggest as we implied for the boys that

the grade level differences at Buerkle had been pretty well removed by the end of the first year of the affective education program (Table 8). The three variables were GAI, TR+, and CCI. More particularly the fourth grade level girls appeared to be viewed as more artistic - intellectual than their second and third grade level schoolmates. The pattern on attitude toward school (CCI) was inconsistent. The most interesting pattern, and the most supportive of in-service teacher training, belonged to TR+ data. The teachers actually became more and more positive toward the students as their grade levels increased. This pattern is unique and the opposite to the data discussed earlier for 143 classrooms (Barclay, 1974).

Differences Among the Three Grade Levels at Shannon (Boys)

The analysis of the 12 classroom units at Shannon revealed a large number of differences among the three grade levels on the BCCI scales (Table 9). The patterns by grade level for the eight variables on which boys were different are fairly similar as those reported elsewhere (Barclay, 1974). That is, in the main the second grade level boys scored higher than the fourth grade boys. Thus second grade level boys have more self-competency, more outdoor masculine, intellectual, social, and overall career awareness interests than fourth grade boys. They also have a more positive attitude toward school than their older schoolmates. On the teacher ratings the scores show some inconsistencies over grade levels. Usually teacher positive and negative ratings are more severe the longer the boy is in school. This pattern did not completely appear for the Shannon boys. In the overall service of the BCCI the Shannon boys are typical and serve as an excellent control group for the Stuttgart affective education program.

Differences Among the Three Grade Levels at Shannon (Girls)

A truly surprising finding occurred upon the grade level analysis of Shannon girls: no grade level differences were obtained on the BCCI. Normally we would anticipate grade level differences suggesting a increased need in several BCCI areas and a heightened teacher dissatisfaction toward the girls over grade level.

Differences Between the Two Schools as of May 1975

An appropriate concern is over the degree to which Buerkle, the program school, and Julia Shannon, the control school, were similar. Earlier Padgett (1976) indicated that the two schools were similar in terms of the number of suspected problems in each of the eight areas. In this paper we extended the analysis to look at the differences for boys and for girls who had been enrolled at the two schools from May 1975 to May 1976. For this analysis of variance we considered only those boys and girls who were now on third and fourth grade levels (Table 10).

The lack of differences on most of the selected BCCI scales is extremely interesting. The boys were different on only TR- such that the Shannon teachers were more negative than the Buerkle teachers. The very likely possibility that the in-service training program worked must be seriously considered. For the girls three differences between schools were found. Shannon girls were more interested and aware of realistic-outdoor career activities than Buerkle girls. Meanwhile, the Buerkle girls received fewer negative teacher ratings and enjoyed a more positive attitude toward school the girls at Shannon. Once again, the data on these latter two BCCI variables suggest the apparent value of the in-service program for the teachers at Buerkle.

Analysis of Changes in BCCI Scores

In order to understand the full impact of the first full year of the affective education program in Stuttgart we performed an analysis of covariance for the 15 selected BCCI variables. For this analysis the May 1975 scores served as the covariate for the similar May 1976 scores. The difference for nine BCCI scales are presented in Table 11. The analyses revealed a series of main effect differences by boys vs girls, by 3rd vs 4th, and by schools. Each of these sets of comparisions will be briefly discussed in the following paragraphs.

Boys vs Girls. Boys were found to be more realistic-masculine, more enterprising, and more disruptive in the eyes of their classmates than girls in the third and fourth grade levels. The boys were more aware of realistic-outdoor career activities than boys in there grade levels. Meanwhile the girls were more aware of socially oriented career activities and of overall career awareness and enjoyed a more positive attitude toward school than their male counterparts. The gist of these two patterns of differences is again boys will be boys and girls will be girls!

Third vs Fourth. The boys and girls in the fourth grade level classrooms at the two schools seemed to earn more positive teacher ratings than their third grade level schoolmates. This difference is unique because we would anticipate based upon Barclay's major study of 143 classrooms (1974) that the third grade level boys and girls would obtain a higher positive teacher rating than fourth grade level children.

Buerkle vs Shannon. In the comparisons of the experimental and control schools we found differences on three BCCI variables. Whereas we found no difference in these analyses for the peer nomination information of the BCCI, we did find differences in self-competency, teacher judgments and attitude toward school. A suggestion from these data is that the affective education program

benefitted individual students and individual teachers more so than it did groups of children. This finding is particularly interesting and important because it suggests that teachers are very crucial for an effective affective education program: they seem to become more positive and to facilitate an increase in self-competency and a more positive attitude toward school.

A number of significant interations between student sex and grade level, sex and school and grade level and school. The results of these interactions will be discussed briefly in the following paragraphs.

Gender by Grade Level. The plot of the four significant interactions of these two main effects revealed for STOT, GAI and GTOT that third grade level boys scored higher than their female classmates and that the fourth grade level girls scored higher than their male classmates. In the fourth interaction the boys in the upper grade level scored much lower than the fourth grade level girls in terms of overall career awareness. The interactions of gender by grade level suggest that the boys and girls in Stuttgart develop their self-competency, their influence upon peers, and their career awareness, which is fairly normal and anticipated.

Gender by School. In general the data from 143 classrooms indicate that girls appear to have a better attitude toward school than boys (Barclay, 1974). In this analysis comparing boys and girls in the two schools we discovered that the children at Buerkle had very similar positive attitudes, but that the boys at Shannon were considerably less positive than the girls at Shannon. This interaction supports the notions that individual students on some measures appeared to benefit from the affective education program and that those children not involved in the program, particularly by boys appeared to lose out.

Grade by School. In Table 11A the several interactions particularly for TR+ and TR- show a pattern that supports the affective education program in

Stuttgart. Boys became more aware of realistic-outdoor career activities and the girls became less aware, which might be a pattern anticipated by normal social development of children. For the two BCCI scales on teacher judgments of ratings a plot of the means shows the value of the program at Buerkle: Overall the Buerkle boys and girls received more positive teacher ratings than the children at Shannon. The differences were such that the both grade levels at Buerkle were higher than both grade levels at Shannon. For the negative teacher ratings the interaction is such that fourth graders at Shannon received more negative teacher ratings than any other grade level and third graders at Shannon received fewer negative teacher ratings than any other classroom. The latter set of interactions on TR- suggests that the presence or absence of the in-service program had an unpredictable effect upon teacher's use of negative adjectives.

The program managers involved in a program similiar to the Stuttgart effort should pay greater attention to the main effect results than to these interactions. In the main, the interactions relate to social development of boys and girls. Some of the interactions might be also related to differential expectations at the two schools. From these several analyses we discovered that special groups could be identified.

Special Groups

Throughout these analyses we were frequently impressed by the incomplete data sets. Rather than losing the poential information from these children we identified two special groups, "goners" and "newcomers". For these analyses a "goner" was a student who had left their school after the May, 1975 administration of the BCCI. These children might have departed their host school at the end of 1975-76 or anytime prior to May, 1976. A "newcomer", in contrast, was a student who was present for the May 1976 BCCI administration. These children entered their school sometime after May 1975, probably September 1976. The question for

these data was to what degree are these two groups of children different from those who have been in the complete affective education program.

Children Who Left Buerkle

During the reporting period 14 boys and 15 girls left Buerkle and became "goners" for this report. At this point we are unaware of the several reasons for their departing Buerkle. Instead we are simply interested in their degree of similarity of those who stayed in the affective education program school until May 1976.

The data for this comparison was limited to the "suggested problem area" display from the BCCI printout. We developed a separate "classroom unit" of goners and prepared a table of percentages for each area by sex. At the same time we developed a similar profile for the children who participated in the program at Buerkle. These two profiles are presented in Table 12.

A comparison of these two profiles reveals a serious challenge for the Stuttgart educators and community leaders. The boys in the "goners" group appeared to be more "problematic" than the girls. That is, more boys who left Buerkle appeared to have self-competency, group interaction, self-control, career development, cognitive motivation, and attitude toward school problems than the boys who stayed and benefitted from the program at Buerkle. By changing the arbitrary difference of nine percentage points to a 14 point difference we eliminate group interaction and career development. The point is, boys who left Buerkle appeared on the BCCI to be different from the boys who stayed. And a similar, but less dramatic set of contrasts can be made for the girls who left Buerkle. By using the nine percentage point difference rule the "goner" girls exceeded the stayers in four BCCI problem areas-- self-competency, group interaction, physical development, and cognitive-motivation. Should we raise the arbitrary different to 14, the remaining, salient problem for the girls

is group interaction. Thus, girls who leave Buerkle appear to be less dramatically different from the girls who stay at Buerkle.

The comparison for boys and girls who leave and those who stayed at Buerkle suggest (1) the leavers probably had a hard time establishing themselves in the areas assessed by the BCCI, (2) the teachers, counselors and student should intensify the "orientation into the class" for new children and (3) orientation could be a sequence designed to establish relationships (e.g., teacher/counselor and student, teacher/counselor and students including "newcomers," a buddy-system and the "magic circle").

Evaluation is similar to a scientific exploration. We seize upon one set of data and try to follow it as far as possible. Fortunately a second special group of students at Buerkle was identified. And this group might reinforce our suggestions for orienting a new student into the system.

Children Who Entered Buerkle

Sometime during the reporting period 12 boys and eight girls enrolled at Buerkle and become "newcomers" for this report. At this point we are unaware of how long "newcomers" participated in the affective education program at Buerkle. Indeed, we simply want to understand the degree of similarity between the "newcomers" and "stayers" at Buerkle.

The method for creating a "newcomer" and the "stayer" profiles has been described earlier for the "goner" and "stayer" discussion. The two profiles are presented in Table 13.

A comparison of these two profiles reveals two patterns of acceptance. On the one hand a higher percentage of "newcomer" boys appear to have self-control problems than boys who have participated in the affective education program. Interestingly, a smaller percentage of these 12 "newcomer" boys appeared to have verbal skills, career development, and cognitive-motivation problems than the "stayers"

at Buerkle. Again in this contrast we are using the arbitrary nine percent difference. By raising our difference to 14 percent we show that "newcomer" boys are not different from their host "stayers". On the other hand using the nine percentage point difference "newcomer" girls appear to have a very difficult adjustment to the girls at Buerkle. That is, the percentage of "newcomer" girls with suggested problems exceeded their hosts in group-interaction, verbal skills development, physical development, and cognitive-motivation. It would appear using both the 14 and nine percentage point differences that the Buerkle girls make the life of the newcomer girls extremely difficult.

A tentative point can be made now. The "magic circle" program appears to integrate effectively boys into Buerkle, but it does not meet the needs of newcomer girls. Thus, once again the value of the affective education program is demonstrated in this report.

SUMMARY

The affective education program which became "The Circle" and in-service teacher training for a team approach had a number of anticipated benefits and several unanticipated, extra effects. More specifically the affective education program conducted in Buerkle School produced data which showed:

1. a reduction of shyness or being withdrawn for 50 percent of the boys and girls so identified in May, 1975;
2. a reduction of disruptiveness for 50 percent of the boys and girls so identified in May, 1975;
3. a reduction of the BCCI self-competency skill deficit or need for 80 percent of <u>both</u> girls and boys so identified in 1975;
4. a reduction of the BCCI physical development skill deficit for 80 percent of <u>both</u> boys and girls so identified in May, 1975;
5. an improvement in the attitude toward school for 80 percent of the boys and girls identified by the BCCI as having a negative

attitude in May, 1975;

6. a reduction in group interaction skill deficits for 75 percent of the boys so identified in 1975;

7. a reduction in the cognitive-development needs for 77 percent of the boys;

8. the 12 Shannon classrooms were extremely variable in 1975 and again in 1976 (without the focus of the affective education program);

9. the Buerkle grade levels(two, three, and four) in 1976 appeared to be fairly similar for boys and girls suggesting that "The Circle" was focusing teacher and students on affective education;

10. the Shannon grade levels in 1976 appeared to be extremely divergent for boys and extremely convergent for the girls in 1976;

11. the 1975 analysis between the two schools on 15 selected BCCI scales revealed a minimum of differences except on teacher rating scales. Buerkle teachers were less negative toward boys and girls which suggest the value of the 12-week pre-program in-service training;

12. boys and girls continue to be different, but in ways which suggest boys will be boys and girls will be girls;

13. fourth grade level children obtained more positive ratings than did third grade level children which probably is a combined result of maturation and the affective education program at Buerkle;

14. Buerkle children's self-competency was stronger than the Shannon children's after one year of the affective education program;

15. positive teacher ratings of children were higher at Buerkle than at Shannon after one year of the affective education program;

16. Buerkle boys and girls appeared to have a more positive attitude toward school than did the Shannon children after one year of the

affective education program;

17. boys and girls appeared to mature differently in at least four areas measured by the BCCI during the program year;

18. the children at Buerkle had similar positive attitudes about school, but the boys at Shannon were considerably less positive than the girls at Shannon during 1975-1976;

19. Buerkle boys and girls in both grade levels (3rd and 4th) received more positive teacher ratings than boys and girls in both grade levels at Shannon;

20. Shannon fourth grade level children had more negative teacher ratings than any other group and the Shannon third grade level children received fewer negative teacher ratings than the children at Buerkle or their fourth grade level schoolmates;

21. boys who left Buerkle during 1975-1976 appeared to have more affective problems than boys who stayed in the affective education program. These problem areas involved self-competency, group interaction, self-control, career development, cognitive-motivation, and attitude toward school;

22. girls who left Buerkle appeared to have more self-competency, group interaction, physical development and cognitive-motivation problems than the girls who stayed at Buerkle during the academic year;

23. "newcomer" boys appeared to benefit greatly from the "circle" program since fewer boys had verbal skill, career development, and cognitive-motivation problems than the boys who had been in the program throughout the year; and,

24. "newcomer" girls appeared to have a difficult time adjusting to the affective education program at Buerkle.

Thus in at least twenty-four different ways we have been able to demonstrate that the affective education program undertaken in Stuttgart did work. The reduction in the incidence of shyness and of disruptiveness coupled with the dramatic gains for boys in five areas--self-competency, physical development, attitude toward school, group interaction, and cognitive-motivational development--are exciting and rewarding. The gains made by girls in most of these same areas reinforces our enthusiasm for the program. Further the real differences between the two schools in self-competency, positive teacher ratings, and attitude toward school mean the commitment of the School Board and program management staff was supported by the data. The extra discovery about "goners" and "newcomers" (possibly "migrants") simply points again to the belief that exciting, positive, desirable, exemplary events are occurring in Stuttgart.

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Table 1 Changes in BCCI Status for

Shy and Disruptive Boys and Girls

Overtime (May 75 to May 76)

Status	Sex	
Directions	Boys	Girls
Shy/Reticent		
Reduce	1	1
Acquire	5	1
Maintain	0	2
Disruptive		
Reduce	3	1
Acquire	4	4
Maintain	1	3
Totals	14	12

Note: One boy continued to appear as a combination of shy and disruptive (D5X, E1X). His self-competency appeared to develop from May to May! One girl shifted from disruptive to reticent during the same period (D2D, C2R). Her self-competency appeared to help develop control for her behavior.

Table 2: Changes in Suggested Problem Areas (Affective Needs) for Girls and Boys During 1975-1976

PROBLEM AREA	Sex	STATUS OF PROBLEM AREA				
		Identified May 75	Present May 76	Percent Reduced	New May 76	Total May 76
Self-competency	girls	3	0	100	4	4
	boys	10	1	90	4	5
	both	13	1	92	8	9
Group interaction	girls	28	9	64	5	14
	boys	8	7	75	13	15
	both	36	11	69	18	29
Self-control	girls	5	3	40	3	6
	boys	4	1	75	7	8
	both	9	4	55	10	14
Verbal Skills	girls	3	1	66	2	3
	boys	2	1	50	5	6
	both	5	2	60	7	9
Physical	girls	10	2	80	4	6
	boys	8	1	88	4	5
	both	18	3	83	8	11
Career	girls	3	1	66	1	2
	boys	4	2	50	3	5
	both	7	3	57	4	7
Cognitive	girls	14	5	64	5	10
	boys	13	3	77	10	13
	both	27	8	70	15	23
Attitude	girls	5	0	100	2	2
	boys	14	4	71	5	9
	both	19	4	79	7	11

Table 3

Summary of Analysis of Variance for Selected BCCI Scale Scores,

Means and F Ratio's for Buerkle Males (May 1976)[1]

Classroom		Variable Name									
ID	N	STOT	GAI	GRM	GSC	GE	GR	GD	GTOT	REAL	INT
14-25	12	16.6667	3.6667	5.5833	6.0833	7.0000	2.5000	3.5833	22.3333	7.9167	5.2500
14-26	7	12.0000	1.2857	4.7143	4.1429	4.5714	2.7143	2.0000	14.7143	6.5714	6.8571
14-27	7	17.1429	1.5714	6.1429	4.8571	7.4286	3.1429	4.8571	20.0000	7.5714	5.5714
14-28	9	14.4444	3.4444	4.4444	5.8889	5.5556	2.8889	3.0000	19.333	6.8889	5.4444
14-29	10	15.9000	2.4000	6.0000	4.4000	6.3000	3.3000	4.0000	19.1000	5.7000	5.1000
14-30	8	17.7500	4.3750	7.1250	7.1250	8.6250	4.3750	2.3750	27.2500	6.1250	5.8750
14-31	10	15.8000	5.0000	5.8000	6.3000	7.4000	4.2000	3.6000	24.5000	3.6000	3.6000
14-32	9	14.8889	2.6667	5.7778	9.0000	9.5556	2.1111	4.3333	27.0000	6.3333	4.5556
14-33	7	16.5714	1.4286	4.2857	4.4286	5.2857	2,1429	3.2857	15.4286	5.5714	3.8571
14-34	14	16.2857	2.7857	5.5714	4.5000	5.2857	1.4286	3.01714	18.1429	7.2143	5.5000
$\bar{X}$		15.8172	2.9785	5.5699	5.6774	6.6774	2.8065	3.4194	20.9032	6.3978	5.1398
S.D.		3.7992	4.0054	4.6284	6.3608	6.3300	3.2779	4.8484	16.7935	3.3334	2.5200
F Ratio		1.490	.813	.252	.497	.528	.786	.228	.548	1.434	1.200
P Level		.165	.607	.984	.873	.851	.631	.989	.836	.186	.306

Table 3 con't

		Variable Name				
ID	N	SOC	VTOT	TR+	TR-	CCI
14-25	12	4.5000	37.1667	14.0000	10.7500	9.7500
14-26	7	5.4286	39.2857	7.8571	4.4286	9.4286
14-27	7	4.4286	37.4286	16.7143	7.5714	11.8571
14-28	9	8.0000	42.0000	16.0000	13.2222	8.8889
14-29	10	6.4000	35.9000	17.2000	16.9000	9.4000
14-30	8	6.7500	38.1250	12.3750	5.000	10.3750
14-31	10	4.0000	31.2000	21.5000	5.9000	10.0000
14-32	9	4.8889	35.5555	14.5556	6.2222	8.5556
14-33	7	5.0000	32.8571	23.7143	11.0000	10.8571
14-34	14	5.3571	37.8571	20.7857	6.8571	9.9286
$\bar{X}$		5.4516	36.7419	16.7527	8.9140	9.8387
S.D.		2.9654	10.2278	10.7740	8.1490	2.6305
F Ratio		1.679	.796	1.674	2.658	1.041
P Level		.107	.622	.108	.009	.415

1. These ten classroom represent three grade levels (25 to 28 = 2) (29 to 31 = 3) (31 to 34 = 4).

Table 4

Summary of Analysis of Variance for Selected BCCI Scale Scores, Means and F Ratio's for Buerkle Females (May 1976)[1]

Classroom		Variable Name									
ID	N	STOT	GAI	GRM	GSC	GE	GR	GD	GTOT	REAL	INT
14-25	7	16.0000	4.000	0.7143	5.0000	3.4286	3.4286	1.5714	13.1429	4.4286	4.8571
14-26	11	17.0909	4.7273	2.6364	5.6364	5.0000	2.6364	3.0000	18.0000	5.0000	5.4545
14-27	11	15.3636	5.1818	2.2727	6.1818	4.5455	2.6364	1.5455	18.1818	2.1818	4.6364
14-28	4	18.5000	5.2500	2.7500	6.0000	6.5000	3.2500	3.0000	20.5000	7.2500	5.7500
14-29	10	14.8000	4.6000	2.0000	6.5000	3.4000	2.9000	0.9000	16.5000	2.1000	3.9000
14-30	9	14.5556	5.0000	2.3333	5.7778	3.7778	2.1111	2.0000	16.8889	3.8889	5.8889
14-31	9	16.5555	3.4444	1.3333	5.6667	5.3333	2.2222	2.1111	15.7778	3.0000	5.2222
14-32	6	15.3333	8.6667	1.5000	5.5000	1.1667	2.0000	0.6667	16.8333	2.6667	5.1667
14-33	8	19.3750	8.2500	2.8750	8.0000	7.3750	3.2500	1.7500	26.5000	3.0000	5.2500
14-34	5	14.0000	9.0000	2.8000	10.6000	10.4000	6.0000	3.2000	32.8000	1.6000	3.6000
$\bar{X}$		16.1000	5.5375	2.1125	6.3375	4.8625	2.8875	1.9125	18.8500	3.3750	4.9750
S.D.		3.7166	6.2093	2.5507	5.3792	4.7274	3.8352	2.1828	14.4880	2.5377	2.4545
F Ratio		1.655	.707	.549	.519	1.897	.480	1.151	1.002	3.324	.640
P Level		.116	.701	.834	.857	.066	.883	.340	.447	.002	.760

Table 4 con't

		Variable Name				
ID	N	SOC.	VTOT	TR+	TR-	CCI
14-25	7	9.2857	41.7143	17.1429	6.7143	10.8571
14-26	11	9.3636	43.9091	8.6364	3.5455	10.1818
14-27	11	9.3636	40.1818	18.7273	4.5455	11.6364
14-28	4	7.5000	43.2500	21.2500	6.5000	11.7500
14-29	10	7.4000	34.3000	25.7000	9.3000	9.5000
14-30	9	8.1111	40.0000	12.1111	4.3333	8.6667
14-31	9	8.6667	39.4444	20.6667	5.5556	10.6667
14-32	6	8.0000	40.3333	14.8333	4.8333	11.1667
14-33	8	9.1250	41.1250	30.3750	1.5000	11.3750
14-34	5	8.0000	36.4000	23.4000	4.0000	8.6000
$\bar{X}$		8.5875	39.9125	18.8375	5.0625	10.4125
S.D.		2.4427	9.1322	10.6432	6.5937	2.2485
F Ratio		.795	.971	4.680	.882	2.236
P Level		.623	.472	.000	.547	.029

1. These ten classroom represent three grade levels (25 to 28 = 2) (29 to 31 = 3) (31 to 34 = 4).

Table 5

Summary of Analysis of Variance for Selected BCCI Scale Scores,

Means and F Ratio's for Shannon Males (May 1976)[1]

Classroom		Variable Name									
ID	N	STOT	GAI	GRM	GSC	GE	GR	GD	GTOT	REAL	INT
14-35	11	16.3636	4.7273	5.1818	6.0000	7.1818	2.9091	3.1818	23.0909	8.0000	7.1818
14-36	12	14.3333	2.9167	4.5833	4.5000	7.6667	2.9167	3,3333	19.6667	5.4167	4.1667
14-37	14	17.4286	2.7857	4.6429	5.6429	8.0714	2.7857	3.9286	21.1429	7.7857	6.9286
14-38	9	16.3333	2.1111	7.7778	6.3333	9.7778	2.5556	6.1111	26.0000	7.4444	6.0000
14-39	12	15.7500	4.4167	5.4167	6.3333	7.7500	3.0000	4.4167	23.9167	6.9167	6.4167
14-40	13	15.3077	4.3077	4.6154	5.1538	6.3846	2.3846	4.1538	20.4615	5.7692	4.9231
14-41	10	17.6000	1.7000	3.9000	4.2000	4.7000	2.7000	3.8000	14.5000	9.1000	7.1000
14-42	10	15.6000	4.5000	6.2000	6.3000	6.3000	3.6000	3.1000	23.3000	6.3000	5.4000
14-43	12	14.1667	1.7500	4.1667	3.3333	4.7500	3.0833	3.3333	14.0000	5.5000	5.4167
14-44	8	12.2500	.6250	3.1250	1.8750	4.0000	2.6250	2.6250	9.6250	4.3750	3.2500
14-45	11	16.5454	3.6364	5.3636	5.6364	8.0000	2.0909	3.0000	22.6364	4.8182	4.7273
14-46	14	12.0714	2.2857	3.5714	3.6429	4.7857	2.9286	2.5000	14.2857	5.3571	4.2857
X		15.3088	3.0441	4.8309	4.9412	6.6324	2.8015	3.6029	19.4485	6.3971	5.5074
S.D.		3.7367	4.2214	5.1862	5.1980	6.7745	3.1123	4.3330	17.3742	3.1418	2.7189
F Ratio		3.092	1.031	.543	.730	.685	.149	.489	.842	2.516	2.671
P Level		.001	.424	.871	.709	.752	.999	.908	.007	.004	

Table 5 con't

Variable Name				
SOC	VTOT	TR+	TR-	CCI
7.5455	45.7273	16.8182	12.0000	9.3636
5.6667	34.2500	18.3333	6.4167	8.2500
5.2857	41.3571	16.2143	4.1429	11.6429
4.6667	38.3333	13.7778	15.5556	7.8889
5.0000	39.1667	8.5000	12.3333	9.1667
5.1538	36.3077	13.3846	5.6923	8.3077
7.3000	45.6000	11.2000	3.4000	9.7000
5.7000	36.6000	7.7000	2.5000	5.9000
4.5833	35.8333	15.7500	12.1667	7.9167
2.2500	27.0000	10.0000	3.2500	6.5000
5.0909	33.9091	14.0000	13.0000	7.9091
4.0000	31.2857	22.0000	8.7857	6.0000
5.2132	37.1985	14.3529	8.2794	8.2941
3.1350	10.7861	9.5774	7.7217	2.9461
2.088	3.100	2.529	4.785	4.998
.026	.001	.007	.000	.000

1. These 12 classrooms represent three grade levels (35 to 38 = 2) (39 to 42 = 3) (43 to 46 = 4).

Note: There are 12 classrooms at Shannon rather than 10 at Buerkle

Table 5A

Summary of Analysis of Variance for BCCI Scale Scores,

Means, and F Ratio's for Shannon Males (May 1975)[1]

Classroom		Variable Name									
ID	N	STOT	GAI	GRM	GSC	GE	GR	GD	GTOT	REAL	INT
12-53	12	17.83333	2.9167	5.5833	5.0000	5.8333	3.0000	4.0833	19.3333	7.9167	6.3333
12-54	12	16.6667	4.2500	5.0000	5.7500	8.2500	2.7500	3.5000	23.2500	5.8333	5.0833
12-55	11	16.7273	5.1818	5.0000	5.0909	6.4545	3.0000	4.2727	21.7273	10.3636	7.5455
12-56	13	17.9231	2.3077	3.9231	3.3077	4.7692	2.4615	3.3077	14.3077	8.4615	6.1538
12-57	13	13.7692	1.6154	3.6154	3.7692	4.7692	1.9231	3.0769	13.7692	5.3846	4.6154
12-58	13	13.0000	2.6923	4.1538	4.3846	4.9231	2.3846	2.6154	16.1538	4.3846	3.1538
12-59	14	14.6429	2.0000	4.2857	4.4286	5.1429	3.1429	4.0000	15.8571	6.3571	4.8571
14-60	12	17.0833	3.0833	4.2500	4.5833	5.0833	2.5000	3.3333	17.0000	7.8333	6.1667
13-12	10	14.1000	2.4000	6.0000	2.5000	2.9000	1.5000	4.7000	13.8000	4.4000	3.0000
13-13	11	14.4545	4.0000	6.3636	4.8182	7.3636	2.3636	4.5455	22.5454	6.4545	4.8182
13-14	9	17.2222	1.6667	8.1111	5.0000	8.0000	2.2222	5.7778	22.7778	8.111	6.5556
13-15	9	15.4444	2.8889	6.5556	5.1111	6.0000	2.8889	3.4444	20.5555	5.6667	3.4444
X		15.7050	2.8993	5.0863	4.4604	5.7338	2.5252	3.8201	18.1799	6.7482	5.1511
S.D.		4.1867	4.3461	6.0738	3.4035	5.2262	2.4356	3.9107	14.7699	3.3646	2.8890
F Ratio		2.203	.690	.486	.753	.930	.424	.493	.690	4.038	3.260
P Level		.018	.747	.909	.687	.515	.943	.905	.747	.000	.001

Table 5A con't

Variable Name				
SOC	VTOT	TR+	CCI	TR-
8.5833	44.2500	9.4167	10.5833	16.1667
3.6667	34.3333	23.6667	8.6667	3.2500
9.5455	51.9091	9.1818	11.4545	13.0909
7.4615	44.9231	20.9231	10.3846	6.6154
5.1538	36.0000	16.6923	7.6154	15.7692
4.2308	30.4615	15.6154	9.7692	7.4615
6.6429	37.8571	10.6429	8.2143	13.2143
6.9167	43.2500	6.1667	8.2500	6.1667
3.2000	29.1000	4.7000	8.2000	8.2000
4.4545	35.4545	7.7273	7.7273	6.7273
6.1111	41.8889	10.5556	8.0000	18.3333
5.3333	35.2222	11.0000	6.6667	23.0000
5.9784	38.7482	12.5108	8.8561	11.1655
3.3654	11.5709	10.3057	2.9527	9.6238
5.211	4.886	5.036	3.028	5.655
.000	.000	.000	.001	.000

1. Note these 12 classroom units have been group into grade levels as follows: (53 to 56 = 2) (57 to 60 = 3) (12 to 15 = 4).

Table 6

Summary of Analysis of Variance for BCCI Scale Scores,

Means, and F Ratio's for Shannon Females (May 1976)[1]

Classroom		Variable Name									
ID	N	STOT	GAI	GRM	GSC	GE	GR	GD	GTOT	REAL	INT
14-35	8	14.0000	3.0000	2.3750	5.8750	4.3750	3.0000	2.5000	15.6250	6.5000	6.3750
14-36	9	10.0000	3.7778	2.6667	5.1111	3.4444	2.7778	1.6667	15.0000	0.5556	1.5556
14-37	10	17.5000	5.5000	3.1000	6.2000	3.0000	3.0000	1.6000	17.8000	5.8000	7.3000
14-38	15	17.7333	2.6000	1.2000	4.6000	2.8000	2.6667	0.7333	11.2000	2.4667	5.6667
14-39	9	13.7778	3.2222	2.0000	5.4444	3.6667	2.7778	0.8889	14.3333	3.1111	5.2222
14-40	8	15.7500	2.8750	2.3750	6.6250	4.2500	3.5000	0.7500	16.1250	2.3750	6.0000
14-41	9	15.1111	3.8889	1.5556	4.7778	4.3333	2.1111	1.0000	14.5556	3.0000	5.3333
14-42	8	16.2500	3.3750	1.6250	5.2500	5.0000	2.0000	2.7500	15.2500	6.5000	5.7500
14-43	8	13.7500	7.0000	3.3750	9.1250	5.2500	2.7500	1.5000	24.7500	2.8750	4.1250
14-44	10	14.9000	6.6000	3.0000	8.7000	6.9000	2.8000	2.8000	25.2000	4.0000	5.7000
14-45	9	15.1111	4.3333	1.8889	6.3333	3.3333	4.0000	2.4444	15.8889	2.0000	3.5556
14-46	7	17.7143	4.8571	3.1429	8.7143	4.4286	1.7143	2.1429	21.1429	4.0000	6.7143
$\bar{X}$		15.2545	4.1909	2.2909	6.2636	4.1455	2.7727	1.6727	16.8909	3.5182	5.2818
S.D.		4.0261	5.2085	3.2151	6.9568	3.9255	2.9759	2,1888	17.0447	2.9012	2.6410
F Ratio		3.470	.719	.465	.456	.845	.340	1.251	.598	5.059	4.036
P Level		.000	.719	.920	.926	.596	.974	.264	.827	.000	.000

Table 6 con't

Variable Name				
SOC	VTOT	TR+	TR-	CCI
9.8750	46.1250	13.7500	15.2500	10.7500
5.4444	26.8889	18.3333	5.3333	7.0000
10.4000	48.2000	24.0000	2.4000	10.2000
9.8000	41.3333	18.0000	6.7333	10.4667
8.5556	38.8889	12.1111	8.3333	10.111
10.0000	43.6250	20.3750	3.6250	10.8750
7.2222	37.6667	13.5556	1.6667	9.5556
9.5000	44.7500	10.5000	3.2500	8.2500
7.1250	34.8750	17.2500	8.2500	9.5000
7.9000	39.5000	14.7000	3.3000	9.5000
7.5556	32.8889	12.3333	10.0000	7.0000
9.5714	44.5714	28.8751	3.1429	10.5714
8.6182	39.9182	16.9182	5.9182	9.5091
2.9083	9.7409	10.4803	6.2297	2.7319
3.040	4.973	2.459	4.713	2.585
.002	.000	.009	.000	.006

1. Note these 12 classroom units have been group into grade levels as follows: (53 to 56 = 2) (57 to 60 = 3) (12 to 15 = 4).

Table 6A

Summary of Analysis of Variance for BCCI Scale Scores,

Means, and F Ratio's for Shannon Females (May 1975)[1]

Classroom		Variable Name									
ID	N	STOT	GAI	GRM	GSC	GE	GR	GD	GTOT	REAL	INT
12-53	11	14.5455	5.1818	1.9091	7.0909	6.0000	2.9091	1.8182	20.1818	5.0909	5.5455
12-54	9	16.8889	3.5556	2.5556	5.8889	3.0000	3.3333	2.3333	15.0000	4.1111	5.4444
12-55	6	17.1667	1.8333	2.1667	7.6667	5.1667	3.0000	0.6667	16.8333	4.5000	6.6667
12-56	10	15.5000	5.9000	3.6000	8.7000	5.9000	2.4000	1.6000	24.1000	5.4000	5.7000
12-57	10	10.1000	5.4000	2.9000	6.2000	5.5000	3.4000	1.9000	20.0000	1.6000	3.5000
12-58	10	14.4000	5.4000	2.9000	7.0000	6.7000	3.4000	2.6000	22.0000	1.8000	3.0000
12-59	7	16.7143	7.2857	2.5714	9.7143	5.8571	3.0000	1.2857	25.4286	4.7143	6.4286
12-60	12	18.5833	4.2500	2.6667	5.6667	4.9167	2.4167	1.7500	17.5000	5.4167	4.8333
13-12	13	13.9231	5.0000	2.3077	7.5385	8.4615	3.4615	1.7692	23.3077	3.3846	3.4615
13-13	14	14.9286	4.1429	2.1429	7.0000	5.1429	3.4286	1.8571	18.4286	3.7143	4.7857
13-14	16	12.6250	5.0625	1.2500	5.9375	4.3125	3.1875	1.1875	16.5625	4.5000	5.2500
13-15	16	14.6250	4.5625	2.5000	6.1875	5.8125	2.8125	2.5000	19.0625	2.8125	5.3750
$\bar{X}$		17.7836	4.8209	2.3955	6.8806	5.5896	3.0672	1.8209	19.6866	3.8731	4.9030
S.D.		4.3862					3.0142	1.8712	22.1279	2.7813	2.4735
F Ratio		3.286	.312	.315	.214	.410	.166	.843	.198	2.650	2.248
P Level		.001	.982	,981	.996	.949	.999	.599	.997	.005	.016

Table 6A con't

Variable Name				
SOC	VTOT	TR+	TR-	CCI
9.9091	42.8182	19.1818	8.4545	8.8182
8.7778	39.1111	19.2222	4.1111	9.5556
9.5000	45.8333	20.1667	6.6667	10.6667
7.1000	38.5000	18.2000	4.3000	9.1000
4.0000	23.3000	20.7000	9.5000	6.2000
8.5000	33.2000	17.3000	4.3000	8.2000
8.4286	41.2857	18.1429	6.1429	9.0000
8.1667	42.1667	12.5000	2.9167	9.5000
7.3077	35.1538	10.5385	4.6154	6.8462
6.9286	38.4286	11.5714	4.9286	8.5714
9.6250	42.0000	17.1875	11.1875	7.6250
9.3125	40.1875	13.5625	13.3125	8.2500
8.1567	38.4552	15.9328	7.0896	8.3731
3.1309	10.5279	10.4861	7.0843	2.4820
3.609	3.750	1.318	3.393	2.633
.000	.000	.222	.000	.005

1. Note these 12 classroom units have been grouped into grade levels as follows: (53 to 56 = 2) (57 to 60 = 3) (12 to 15 = 4).

Table 7

Summary of Analysis of Variance for Selected BCCI Scores by Grade Level for Males at Buerkle (May 1976)

Variable	Grade Level Means			Overall			
N	35	28	30	Mean	S. D.	F ratio	P level
GR	2.7714	3.9286	1.800	7.8065	3.2779	3.203	.044
REAL	7.3143	5.0714	6.5667	6.3978	3.3334	3.795	.026

Table 8

Summary of Analysis of Variance for Selected BCCI Scores by Grade Level for Females at Buerkle (May, 1976)

Variable	Grade Level Means 2	3	4	Overall Mean	S.D.	F Ratio	P Level
N	33	28	19				
GAI	4.7879	4.357	8.5789	5.5375	6.2093	3.194	.045
TR+	15.3333	19.7143	23.6316	18.8375	10.6432	4.111	.020
CCI	11.0000	9.6071	10.5789	10.4125	2.2485	3.136	.048

Table 9

Summary of Analysis of Variance for Selected BCCI Scores by Grade Level for Males at Shannon (May, 1976)

Variable	Grade Level Means			Overall Mean	S.D.	F Ratio	P Level
	2	3	4				
N	46	45	45				
STOT	16.1522	16.0000	13.7556	15.3088	3.7367	6.285	.003
REAL	7.1522	6.9333	5.0889	6.3971	3.1418	6.351	.002
INT	6.0870	5.9111	4.5111	5.5074	2.7189	4.820	.010
SOC	5.8043	5.7111	4.1111	5.2132	3.1350	4.374	.014
VTOT	39.9565	39.2000	32.3778	37.1985	10.7861	7.417	.001
TR+	16.4348	10.3333	16.2444	14.3529	9.5774	6.402	.002
TR-	8.8478	6.2444	9.7333	8.2794	7.7217	2.542	.081
CCI	9.4783	8.3111	7.0667	8.2941	2.9467	8.461	.000

Table 10

Comparison of May 1975 BCCI Scores for Buerkle and Shannon Third and Fourth Graders Enrolled for the Fall May 1975 to May 1976 Period

Sex/Variable	Buerkle	Shannon	Overall	S.D.	F	P
Boys						
N	58	74				
TR-	6.4655	9.3649	8.0909	8.4007	3.961	.046
Girls						
N	47	59				
REAL	2.7021	3.8644	3.3491	2.8687	4.435	.036
TR-	3.0426	5.9661	4.6698	6.1034	6.306	.013
CCI	10.0213	8.7119	9.2925	2.8883	5.613	.019

Table 11

Analysis of Covariance Results (Main Effects)

by Gender, Grade Level and School for

Selected May 1976 BCCI Variables

BCCI Scale	Gender		Grade Level		School			
Score	Male	Female	3rd	4th	Buerkle	Shannon	F	p
STOT					15.99	15.10	3.979	.045
GRM	4.55	3.27					6.411	.012
GE	6.51	5.01					4.899	.026
GD	3.27	2.10					6.394	.012
REAL	5.33	3.82					15.702	.001
SOC	5.54	7.76					34.636	.001
VTOT	35.26	39.09					11.163	.001
TR+			14.94	18.62			8.395	.004
					19.92	14.39	18.990	.001
CCI	8.61	9.65					9.871	.002
					9.86	8.44	18.296	.001

Table 11A

Analysis of Covariance Results (Interactions)

by Gender, Grade Level and School for

Selected May 1976 BCCI Variables

Variable	Gender X Grade Level			Gender X School	Grade X School		
					Buerkle	Shannon	F	P
Name		3rd	4th					
STOT	Boys	16.459	14.718				11.067	.001
	S.D.	3.952	3.610					
	Girls	15.000	15.941					
	S.D.	3.243	3.524					
GAI	Boys	4.295	2.433				6.883	.009
	S.D.	5.909	2.648					
	Girls	3.855	6.647					
	S.D.	3.918	8.515					
GTOT	Boys	23.951	17.732				2.798	.092
	S.D.	20.943	15.508					
	Girls	15.782	22.569					
	S.D.	9.122	25.035					
REAL								

Table 11A con't

Variable	Gender X Grade Level			Gender X School			Grade X School	
					Buerkle	Shannon	F	P
Name		3rd	4th					
REAL				3rd	4.018	5.400	4.433	.034
				S.D.	2.973	3.445		
				4th	5.000	4.301		
					3.594	2.890		
VTOT	Boys	37.377	33.845					
	S.D.	9.928	10.854					
	Girls	38.964	38.686					
	S.D.	8.865	9.545				2.986	.081
TR+				3rd	18.536	11.433	6.076	.014
				S.D.	11.985	9.491		
				4th	21.163	17.055		
				S.D.	9.584	10.706		
TR-				3rd	8.036	5.483		
				S.D.	9.354	6.570		
				4th	5.918	8.356		
				S.D.	6.271	7.765		

Table 11A con't

Variable	Gender X Grade Level		Gender X School		Grade X School			
					Buerkle	Shannon	F	P
Name								
			Buerkle	Shannon				
CCI		Boys	9.810	7.568			9.746	.002
		S.D.	2.762	2.896				
		Girls	10.000	9.475				
		S.D.	2.137	2.628				

Table 12

Comparison of Average Percentage of Suggested Problem Areas for "Goners" and "Stayers" at Buerkle School[1,2]

Group Sex	N	I	II	III	IV	V	VI	VII	VIII
"Goners"									
Boys	14	36	21	21	07	21	14	29	50
Girls	15	13	71	06	00	26	00	40	06
"Stayers"									
Boys	63	15	12	07	04	14	04	15	21
Girls	60	04	47	09	04	17	04	27	10

1. Problem Areas are I = Self-competency, II = Group Interaction, III = Self-Control, IV = Verbal Skills, V = Physical Energy, VI = Career Development, VII = Cognitive Motivation, and VIII = Attitude Toward School

2. Data are derived from the May 1975 BCCI assessment

Table 13

Comparison of Average Percentage of

Suggested Problem Areas for

"Newcomers" and "Stayers" at Buerkle School[1]

Group		BCCI Area								
Sex		N	I	II	III	IV	V	VI	VII	VIII
"Newcomers"										
	Boys	12	08	17	25	00	00	00	08	17
	Girls	08	13	50	13	38	25	00	38	13
"Stayers"										
	Boys	66	07	22	13	14	08	09	21	14
	Girls	55	07	26	11	04	09	05	18	14

1. Data are derived from the May, 1976, BCCI assessment